

SYLLABUS—MATH 124—Spring 09—section 10315

T,Th, 6:10-8:30, TB 101

Text: Swokowski, *Calculus, The Classic Edition*

wk.	Date	Section	List of topics	Misc. Notes
1	1/20	7.1, 7.2	Inverse function theorem; the logarithm	
	1/22	7.3, 7.4	Exp'l function; integration with exp and log	
2	1/27	7.5, 7.6	Other bases; growth and decay	
	1/29	8.1	Inverse trig functions and their derivatives	
3	2/3	8.2, 8.3	Integration with inverse trig functions. Hyperbolics	
	2/5	8.4	Inverse hyperbolics and integration problems	
4	2/10	9.1, 9.2	Integration by parts; trig integrals	2/8 census: last day to add a class.
	2/12	9.3, 9.4	Trig and hyperbolic subs; rational functions	
5	2/17	9.5	More on integrating rational functions	2/17 is first drop date.
	2/19		Review 1.	
6	2/24		EXAM 1	2/23: P/NP deadline
	2/26	10.1, 10.2	Indeterminate forms	
7	3/3	10.3, 10.4	Improper Integrals	
	3/5	11.1, 11.2	Sequences and Series.	
8	3/10	11.3, 11.4	Convergence tests	
	3/12	11.5	Absolute convergence and alternating series	
9	3/17	11.6, 11.7	Power series	
	3/1	11.8, 11.9	Taylor Series	
10	3/24	11.10	Binomial Series	
	3/26		Catch-up time; maybe start chapter 19 here.	3/27: midterms grades available
11	3/31		Review 2.	
	4/2		EXAM 2	
12	4/7	19.1, 19.2	Intro to linear differential equations	
	4/9	19.3, 19.4	Second order linear equ; non-homogenous case: variation of parameters and undetermined coefficients	
13	4/14		Spring Break--NO CLASS	
	4/16		Spring Break...	
14	4/21	19.5	Vibrations	
	4/23	19.6	Power series solutions; Picard and Euler	4/24: last drop date.
15	4/28	13.1, 13.2	Parametric curves, arc length.	
	4/30	13.3-13.5	Polar coordinates.	
16	5/5		Catch-up time	
	5/7		Review 3.	
17	5/12		EXAM 3	
	5/14		Course review.	Last class meeting
18	5/19		Final Exam: comprehensive, in class, usual time (6-9 p.m.) Notebooks due.	